	0300
umb r: 09/885,297A	th STIC Systems Brech CRF Processing Dat: 3/27/02
Changed a file from non-ASCII to ASCII	Edited by: Verified by: (STIC
Changed the margins in cases where the sequence	ce text was "wrapped" down to the next line.
Edited a format error in the Current Application Da	$\cdot$
Edited the Current Application Data section with the applicant was the prior application data; or	ne actual current number. The number inputted by the other
Added the mandatory heading and subheadings for	or "Current Application Data".
Edited the "Number of Sequences" field. The appl	licant spelled out a number instead of using an integer.
Changed the spelling of a mandatory field (the hea	adings or subheadings), specifically:
Corrected the SEQ ID NO when obviously incorrect	t. The sequence numbers that were edited were:
Inserted or corrected a nucleic number at the end o	of a nucleic line. SEQ ID NO's edited:
Corrected subheading placement. All responses mapplicant placed a response below the subheading	nust be on the same line as each subheading. If the , this was moved to its appropriate place.
Inserted colons after headings/subheadings. Head	dings edited included:
Inserted colons after headings/subheadings. Head	· · · · · · · · · · · · · · · · · · ·
Deleted extra, invalid, headings used by an application of the deginal of the deg	ant, specifically:
Deleted extra, invalid, headings used by an application of the deginal of the deg	ant, specifically:  g/end of files;  secretary initials/filename at end of falid text, such as
Deleted extra, invalid, headings used by an application of the deginal of the deginal of the page numbers throughout text;	ant, specifically:  g/end of files;  secretary initials/filename at end of falid text, such as
Deleted extra, invalid, headings used by an application.  Deleted: non-ASCII "garbage" at the beginning page numbers throughout text; other invalingment of the deleted mandatory headings, specifically:	ant, specifically:  g/end of files; secretary initials/filename at end of falid text, such as  fically:
Deleted extra, invalid, headings used by an application of the page numbers throughout text; other invaling the page numbers throughout text; other invalingented mandatory headings, specifically:	ant, specifically:  g/end of files;
Deleted extra, invalid, headings used by an application of the page numbers throughout text; other invalingment of the mandatory headings, specifically: Corrected an obvious error in the response, specifically edited identifiers where upper case is used but low	ant, specifically:  g/end of files; secretary initials/filename at end of falid text, such as  fically:  ver case is required, or vice versa.  eld, specifically:
Deleted extra, invalid, headings used by an applicate Deleted: In non-ASCII "garbage" at the beginning page numbers throughout text; In other invalingment of the invalingment of the page	ant, specifically:  g/end of files; secretary initials/filename at end of falid text, such as  fically:  ver case is required, or vice versa.  eld, specifically:  plicant. All occurrences had to be deleted.  es and adjusted the "(A)Length:" field accordingly (error
Deleted extra, invalid, headings used by an application of Deleted: Inon-ASCII "garbage" at the beginning page numbers throughout text; Inserted mandatory headings, specifically:  Corrected an obvious error in the response, specifically deleted identifiers where upper case is used but low Corrected an error in the Number of Sequences field.  A "Hard Page Break" code was inserted by the application.	ant, specifically:  g/end of files; secretary initials/filename at end of falid text, such as  fically:  ver case is required, or vice versa.  eld, specifically:  plicant. All occurrences had to be deleted.  es and adjusted the "(A)Length:" field accordingly (error

\*Examiner: The above corrections must be communicated to the applicant in the first Office 3/1/95 Action. DO NOT send a copy of this form.



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/885,297A

DATE: 03/27/2002 V 6

Input Set : A:\PTO.DC.txt

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3 <110> APPLICANT: Ingram, Lonnie O
              Zhou, Shengde
      6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR SIMULTANEOUS
              SACCHARIFICATION AND FERMENTATION
      9 <130> FILE REFERENCE: BCI-024CP
     11 <140> CURRENT APPLICATION NUMBER: 09/885,297A
C--> 12 <141> CURRENT FILING DATE: 2001-06-19
     14 <150> PRIOR APPLICATION NUMBER: 60/214,137
     15 <151> PRIOR FILING DATE: 2000-06-26
     17 <150> PRIOR APPLICATION NUMBER: 60/219,913
     18 <151> PRIOR FILING DATE: 2000-07-21
     20 <160> NUMBER OF SEQ ID NOS: 17/
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     27 <213> ORGANISM: Zymomonas mobilis
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     32 cggttagcca taaccatttt acctgtccgg cggccttaat accttgatca gatggttcgt 120
     34 ggtgttgtta ccttgccgaa gggcaccggt aaaaatgttc gcgtcggtgt tttcgcccgt 180
     36 ggcccgaaag ctgaagaagc taaagctgct ggtgcagaag ttgtcggcgc agaagacctg 240
     38 atggaagcca ttcagggcgg cagcattgat ttcgatcgtg atgcccttta tactgaaatt 300
     40 gccttgcgct gccataatga agcagcctcc ggtgttttgg cagatttaag cgctgcctga 360
     42 ttttcgtgat cctctagagt ctatgaaatg gagattcatt tatgcctctc tcttattcgg 420
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     57 gcatggacat cccagacatt gggattgaac ctgtttggtg tcatgctttt gattacgact 180
     59 tttgctaccc tgatttcgga tattacccgt tttcagtcat ggcaaacctt gctgcattac 240
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     63 atcagagccg attttttag tgcggcgata ggtatgttgg tagggttagg cggtatcttg 360
     65 attttaggca cttcaagatt gggatggcct gccgaggtca agccagatgc cttgctttgt 420
     67 atgctgatta tactttttat gaatatcggc tggtccaacc gggatgttgc ggctgtgtaa 480
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Input Set : A:\PTO.DC.txt

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81 ccagattagt aacggtttat ccaaaccagc acagatgatg atcggctaac atgcatccac 900
83 cggcagcacc ggccgtttta tgcttgggat tattgatatg ccgaaaagga tacaacatct 960
85 ggaagaaaaa gacgaaggcc ggaataagcg cccattctgc aaaattgtta caacttagtc 1020
87 gcgccatcag ggaatgaaaa atcaatccgt ctttttcggc atgagcaacc aacattttca 1080
89 aggtatcatc ctgatgcgca atatcggcat cggttagcca taaccatttt acctgtccgg 1140
91 cggccttaat accttgatca gatggttcgt ggtgttgtta ccttgccgaa gggcaccggt 1200
93 aaaaatgttc gcgtcggtgt tttcgcccgt ggcccgaaag ctgaagaagc taaagctgct 1260
95 ggtgcagaag ttgtcggcgc agaagacctg atggaagcca ttcagggcgg cagcattgat 1320
97 ttcgatcgtg atgcccttta tactgaaatt gccttgcgct gccataatga agcagcctcc 1380
99 ggtgttttgg cagatttaag cgctgcctga ttttcgtgat cctctagagt ctatgaaatg 1440
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Input Set : A:\PTO.DC.txt

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- 224 <222> LOCATION: 3282-4281
- 225 <223> OTHER INFORMATION: n=a,c,g or t
- 227 <220> FEATURE:

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PATENT APPLICATION: US/09/885,297A DATE: 03/27/2002
TIME: 16:35:19

Input Set : A:\PTO.DC.txt

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     235 <220> FEATURE:
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     238 <220> FEATURE:
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     264 gcatggacat cccagacatt gggattgaac ctgtttggtg tcatgctttt gattacgact 180
     266 tttgctaccc tgatttcgga tattacccgt tttcagtcat ggcaaacctt gctgcattac 240
     268 ggttcaaaag cttttcagga aaaagatttt aaccaatttg atgatgtcct tgccttttgc 300
     270 atcagagccg attttttag tgcggcgata ggtatgttgg tagggttagg cggtatcttg 360
     272 attttaggca cttcaagatt gggatggcct gccgaggtca agccagatgc cttgctttgt 420
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     276 ccgctttaaa ctggtcacta tttatgagtt tattacgacc tgcgtcagaa ccggaggttg 540
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     284 gaaattcact ttaagcgtca gttttaatga aatcctagac tccattttcc agcagggtgg 780
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     309
     310
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Input Set : A:\PTO.DC.txt

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			tta														1586
317	Leu	Gly	Leu	Ser	Leu	Ala	Cys	Leu	Ser	Ser	Asn	Ala	Trp	Ala	Ser		
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	_	_	tta		_	_	_										1634
321	Glu	Pro	Leu	Ser	Val	Ser	Gly	Asn	Lys		Tyr	Ala	Gly	Glu		Ala	
322					50					55					60		
			ttt														1682
	Lys	Ser	Phe		Gly	Asn	Ser	Leu		Trp	Ser	Asn	Asn		Trp	GLY	
326				65					70					75			
		_	aaa														1730
	Gly	Glu	Lys	Phe	Tyr	Thr	Ala	_	Thr	Val	Ala	Ser		Lys	Lys	Asp	
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			tcc														1778
	Trp	_	Ser	Ser	He	Val		Ala	Ala	Met	GLY		GIn	GIU	ser	GIY	
334		95					100					105				~+ ~	1026
			ctg														1826
	_	Tyr	Leu	GIn	Asp		Ата	GIY	Asn	гàг		гàг	val	GIU	Arg		
	110					115					120			~-~	+ ~ ~	125	1074
		_	gcc	_		_											1874
	Val	Asp	Ala	Ala		Ата	Asn	Asp	мет		val	TTE	TTE	Asp		HIS	
342					130					135	~~~	-++	~~~	++~	140	~~~	1022
																cag	1922
	ser	His	Ser		GIU	Asn	Asn	Arg		GIU	Ala	тте	Arg	155	Pile	GIII	
346				145		+-+	~~~	224	150	~~~	22±	~+ ~	a++		wa a	2 t a	1970
			gcg														19/0
	GIU	мет	Ala	Arg	ьys	Tyr	СТХ		гуѕ	PIO	ASII	vai	170	тут	Gru	116	
350	<b>.</b>		160	~~~	~++	~~~	~++	165	+ ~~	200	22+	200		222	aat	tat	2018
			gag Glu														2010
	туг	175	GIU	PIO	Leu	GIII	180	Ser	пр	SET	TOIL	185	116	цуз	rio	- y -	
354	~~~		gcc	ata	2++	taa		att	cac	acc	att		cca	gat	aac	cta	2066
		_	Ala														2000
	190	Gru	nia	Val	116	195	AIG	116	nry	ALU	200	пор	110	1101	11011	205	
		2++	gtc	aat	aca		ant	taa	tca	саа	_	att	gat	αаа	σασ		2114
			Val														
362	116	116	Val	OLY	210	110	JCI	115		215	11011	, 42		O_Lu	220	001	
	cac	gat	cca	atc		ggg	aaσ	aat	atc		tat	acσ	cta	cat	_	tac	2162
	****	-	Pro														
366	**** 9	110P	110	225	11011				230		-1-			235		- 1 -	
	σασ	σσа	acc		aat.	σασ	t.ca	tta		act	aaa	acc	cgc		qcq	tta	2210
	_		Thr														
370		1	240		1			245	j		7 -		250		-		
	aat	aac		att	aca	ctt	ttc		acc	gag	tga	ggc		gtt	aac	gcg	2258
			Gly														
374		255	1				260	·		_ <del></del>		265					
	gac		aat	gac	gga	ata		caq	aca	gat	acc		gcc	tgq	gta	acg	2306
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Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\03272002\1885297A.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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## VERIFICATION SUMMARY PATENT APPLICATION: US/09/885,297A DATE: 03/27/2002 TIME: 16:35:20

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## VERIFICATION SUMMARY PATENT APPLICATION: US/09/885,297A DATE: 03/27/2002 TIME: 16:35:20

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# Does Not Comply Corrected Diskerts Needed

OIPE

Erroron p. 6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/885,297A

DATE: 03/25/2002 TIME: 10:39:42

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- 4 Zhou, Shengde
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- 7 SACCHARIFICATION AND FERMENTATION
- 9 <130> FILE REFERENCE: BCI-024CP
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  - 15 <151> PRIOR FILING DATE: 2000-06-26
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Input Set : A:\seqlist.txt

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Input Set : A:\seqlist.txt

Output Set: N:\CRF3\03252002\I885297A.raw

954 gcgtccgatt cgtcagcctg gacacctcgc tggctaccgt atctcgtgat aatgacggca 1500 955 cgttgccggc aacctcgctg ttccgtctgt cggctaactc aaagctgatt aacgcgggta 1560 956 cgaaagagaa atcatattag ttacaaggca gcgcaccgga tttgggcgct tttgaacgca 1620 957 attaagtaat ggaatgttgc gtatcaggct gcaatcgcag ccctgttatt ttggggggtga 1680 958 aaagattaat caattagtta cagctaccaa cctgtgccca ggaggaatcg ctgcccggaa 1740 959 cggatgaagt gtaccagttt gcggtataca ggttcccttt gtagacgatc gattggcctg 1800 960 cttcgttatg agtcgctgcc ggcccgccca gtctttgcta acccagttgg ggtaaacgtt 1860 961 ggcattgcag caatcagcgg tttgccggtg tgtcggttgt ggtcggttcg tcaacggtgg 1920 962 tgccatggtg gtatcggttg actgatcggt tgttgtactg gcggcgctgc ccgctttata 1980 963 tggccagctt tgaatgatcg attttactat tttacccgac tcggtcaggt ttttagagtc 2040 964 cggataatag gttgatgccc cttcgctttt atcatttaac gcccagtttg cgttgctgat 2100 965 gttgttgtca cgcatgaacg ttacccaggc gtcggtatct gtctggttca ctccgccatt 2160 966 gccgtccgcg ttaacggcgc cccactcggt gacgaaaagc gcaataccgt tatttaacgc 2220 967 ctggcgggct ttagtgcgta atgactcacc atgggttccc gcgtagaaat gcagcgtata 2280 968 ggcgatattc ttggcgttga ttggatcgcg cgacgcttca tcaacgtttt gcgaccaact 2340 969 gggcgtaccg acaataatca ggttatccgg gtcaatggcg cgaatggcgg aaatcacggc 2400 970 ttcggcataa ggtttaatgg tattgctcca tgaaacctga agcggctcgt tgtagatttc 2460 971 ataaatgaca ttcggcttgt tgccatattt gcgcgccatt tcctggaaga agcgaatggc 2520 972 ttcactgcga ttgttttctg cagaatgtga gtgccagtca ataatcacat acatatcgtt 2580 973 ggcgattgcg gcatccacca ctctttcaac tttggccttg ttgccagccg ggtcctgcag 2640 974 ataaccaccg ctttcctgaa cgcccatagc ggcgcgaaca atgctggatt tccagtcttt 2700 975 tttcagcgac gcaacggtat cggctgtgta gaatttttcc ccaccccaac cattattact 2760 976 ccagaataag ctgttgccgg caaaactttt ggctttttca cctgcgtaga ttttattgcc 2820 977 gctaacggat aacggctcaa cactcgccca ggcattactg gaaaggcagg caaggcttaa 2880 978 toctaaacag gcacaagata gaaacagttt tttacgtggg gcgtgttttt ggctatcgat 2940 979 gactggatgg ttatccgaat aagagagagg cataaatgaa tctccatttc atagactcta 3000 980 gaggatcacg aaaatcaggc agcgcttaaa tctgccaaaa caccggaggc tgcttcatta 3060 981 tggcagcgca aggcaatttc agtataaagg gcatcacgat cgaaatcaat gctgccgccc 3120 982 tgaatggctt ccatcaggtc ttctgcgccg acaacttctg caccagcagc tttagcttct 3180 983 tcagctttcg ggccacgggc gaaaacaccg acgcgaacat ttttaccggt gcccttcggc 3240 984 aaggtaacaa caccacgaac catctgatca aggtattaag gccgccggac aggtaaaatg 3300 985 gttatggcta accgatgccg atattgcgca tcaggatgat accttgaaaa tgttggttgc 3360 986 tcatgccgaa aaagacggat tgatttttca ttccctgatg gcgcgactaa gttgtaacaa 3420 987 ttttgcagaa tgggcgctta ttccggcctt cgtctttttc ttccagatgt tgtatccttt 3480 988 tcggcatatc aataatccca agcataaaac ggccggtgct gccggtggat gcatgttagc 3540 989 cgatcatcat ctgtgctggt ttggataaac cgttactaat ctggcgcgcg acccgataga 3600 990 cagcggcttc cccagccccc agtgagctac caatagcaag ggtgccaccc tgctggaaaa 3660 991 tggagtctag gatttcatta aaactgacgc ttaaagtgaa tttccacatc ccttcaacgg 3720 992 gcgtttttct ctgaaatatt tttcttatcg gaaatgctcg ctccgtatat tggtgaaaga 3780 993 gataaatgcc agcgtaacta caggtgacaa aaagcgtgaa ttgcgtcagg caccatataa 3840 994 acaaaaata ccccaaaggc atatgaagcc aataaccaat gccacaacct ccggttctga 3900 995 cgcaggtcgt aataaactca taaatagtga ccagtttaaa gcggttacac agccgcaaca 3960 996 teceggttgg accageegat atteataaaa agtataatea geataeaaag caaggeatet 4020 997 ggcttgacct cggcaggcca tcccaatctt gaagtgccta aaatcaagat accgcctaac 4080 998 cctaccaaca tacctatcgc cgcactaaaa aaatcggctc tgatgcaaaa ggcaaggaca 4140 999 tcatcaaatt ggttaaaatc tttttcctga aaagcttttg aaccgtaatg cagcaaggtt 4200 1000 tgccatgact gaaaacgggt aatatccgaa atcagggtag caaaagtcgt aatcaaaagc 4260 1001 atgacaccaa acaggttcaa tcccaatgtc tgggatgtcc atgcgacata gacaaaactg 4320 1002 cataccgcat tcaaaacacg gcctgtaatc agaatgccgg tattgccaat gatacgggaa 4380

Input Set : A:\seqlist.txt

```
1003 aagacagate gaatttgatg eegtggataa attgeeggtt gategateee egggtaeega 4440
  1004 getegaatte egagettgge gegeetatge ggtgtgaaat acegeacaga tgegtaagga 4500
  1005 gaaaataccg catcaggcgc cattcgccat tcaggctgcg caactgttgg gaagggcgat 4560
  1006 cggtgcgggc ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat 4620
  1007 taagttgggt aacgccaggg ttttcccagt cacgacgttg taaaacgacg gccagtgaat 4680
  1008 tecateaacg ettgetgtaa eeaggageea aagetatgaa tgtacetttt agetaetegt 4740
  1009 cacccaccct gagcgttgag gcgttaaagc actctattgc ttataagctg atgtttatca 4800
  1010 teggeaaaga eeeggetate getaacaage atgaatgget caacgecaeg etgttegeeg 4860
  1011 ttcgcgatcg tatggttgag cgctggctgc gctcaaaccg cgcgcacgtc tctcaggaag 4920
  1012 ttcgccaggt ttactacctg tcgatggaat ttttgattgg ccgtacgttg tccaacgcgc 4980
  1013 tgttatcgct cggcatttat gaggatgtga acagcgcgct ggaagagatg gggctgaacc 5040
  1014 ttgaagaatt aattgatgaa gaaaacgacc cgggcttagg caacggcggt cttggtcgtc 5100
  1015 tggcggcctg cttcctcgat tcgcttgcgg cgctggggtt accgggccgc ggctacggta 5160
  1016 ttcgctacga ctacgggatg tttaagcaga atatcgtcga tgggcggcag aaagaatccc 5220
  1017 cggattactg gctggaatac ggtaacccgt gggagttcga gcgccataat acgcgctaca 5280
  1018 aagtgcgctt cggcggacgc attcagcagg aaggtaaata ctcccgctgg gtggagaccg 5340
  1019 aagagattat tgccgaagcc tatgaccaga ttatccctgg cttcgacacc gacgccacca 5400
  1020 acacgetgeg cetgtggage geceaggeea geagegagat taaceteggt aaatteaace 5460
  1021 agggcgacta cttcgcggcg gtggaagata aaaaccattc cgagaacgtg tcgcgggtac 5520
  1022 totatocgga tgactogaco tattoaggao gogagotgog cotgoggoag gagtacttoc 5580
  1023 tegittegge gaeggigeag gaeateetea geegeeacta eeageigeat aaaacetaeg 5640
  1024 ccaacctggc ggacaaaatc gcgattcatc tcaacgacac gaacccggtg ctgtcgattc 5700
W--> 1025 cggagctgat gcgcctgctg attgacgagc ataagatcag ctgggatgag ggnnnnnnn 5760
```

Input Set : A:\seqlist.txt

W>	1052	nnnnnnnnn	nnnnnnnnn	nnnnnnnnn	nnnnnnnn	nnnnnnnn	nnnnnnnn	7380
W>	1053	nnnnnnnnn	nnnnnnnnn	nnnnnnnn	nnnnnnnnn	nnnnnnnn	nnnnnnnn	7440
W>	1054	nnnnnnnnn	nnnnnnnnn	nnnnnnnnn	nnnnnnnn	nnnnnnnn	nnnnnnnn	7500
W>	1055	nnnnnnnnn	nnnnnnnnn	nnnnnnnnn	nnnnnnnn	nnnnnnnnn	nnnnnnnnn	7560
W>	1056	nnnnnngaa	ttcgagctcg	gtacccgggg	atcgacataa	ccgataggtc	ctgcattgat	7620
,,	1057	ggactgaaag	gtttcgacgg	caattatata	ggttttgctt	gcccatctgg	cggcatgaat	7680
	1058	agtgtcattc	atgacgatcc	agttcgatat	tcaacagacc	gtctttgtaa	tcggcaccga	7740
	1059	caattttqat	caataaaqcq	tttgacctga	tgcatgaggg	taaatccatt	cgttcggttg	7800
	1060	ttcttttctq	attacctgtc	ctgttaacct	gtggatatag	aaggtcggtt	caatgagtag	7860
	1061	tattctgacg	catctgacaa	ttggttccaa	tgacctgaag	aaggcgcgca	tcttttatga	7920
	1062	tactatttta	gaaccgttgg	gtatcaaact	tattcgcgag	gtcgaaggac	agcgttttgc	7980
	1063	ctatggtaaa	gacggcgaag	aaggacgcat	catcattgta	aagcctatta	atggtgaagc	8040
	1064	cqctaccqct	ggaaatggta	tcactatcgg	tttggcagcg	ccttctgatg	aagctgtcga	8100
	1065	tgctttttat	aaaqcaggct	tggctaatgg	cggtaaggat	gccggagaac	cggggcctcg	8160
	1066	tecggetget	aataattctc	ggggtgccta	tttatatgac	cctgaaggca	ataaaatctg	8220
	1067	cgctttcaat	tttaaataag	atttctttgg	tgcagggtta	ttcaaaatag	ccctgcattt	8280
	1068	tcagtattat	agcggccatt	atggcttttg	ccttgataaa	aaatttatca	gggctgtttt	8340
	1069	tcqtqatqaa	tatttttgat	ttttcaagaa	aagcctgata	tcttccaaca	tctttctttg	8400
	1070	tatataaatg	gagcgagcta	tggcgcgcgt	aactgtcgaa	gactgtatcg	ataaagttca	8460
·	1071	taatcqtttc	gatttgatcc	tctagagtca	acctgcttgt	tactcgtgat	cccattcaca	8520
	1072	agggcgaatt	aattcgccct	tctgttccgt	taccaacact	tgagccggag	gcataatggg	8580
	1073	aaagccaatg	tggcgttgtt	gggcgttgat	gctgatggtg	tggttcagtg	cgtcggctac	8640
	1074	ggcggcgaac	ggctgggaaa	tctataaaag	ccgtttcatg	accacggacg	ggcgcattca	8700
	1075	ggataccggc	aataagaatg	tcagccacac	cgaaggtcag	ggattcgcca	tgctgatggc	8760
	1076	ggtgcattac	gatgaccgca	tcgcgttcga	taacctgtgg	aactggacgc	aaagccacct	8820
	1077	gcggaacacg	accagcggct	tgttctactg	gcgttacgat	ccgtcggcgg	ccaatccggt	8880
	1078	ggtggataag	aacaacgcct	cggatggcga	tgtgctgatt	gcctgggcgt	tgttaaaagc	8940
	1079	gggaaataag	tggcaggaca	accgttacct	gcaggcgtcg	gacagcatcc	agaaagcgat	9000
	1080	catcgccagc	aatatcattc	agtttgcggg	ccgcaccgtg	atgttgcccg	gcgcctatgg	9060
	1081	tttcaacaag	aacagctatg	tgatccttaa	cccgtcgtat	ttcctgttcc	cggcctggcg	9120
	1082	cgactttgct	aaccgcagcc	atcttcaggt	gtggcggcaa	ctgattgacg	acageetgte	9180
	1083	attggtcgga	gaaatgcgtt	tcggtcaggt	cgggctgccg	acggactggg	cggcgctgaa	9240
	1084	cgcggatggc	tcgatggcgc	cggcgacggc	ctggccgtcg	cgtttcagtt	acgacgccat	9300
	1085	tcgtatcccg	ctgtatttgt	actggtatga	cgccaaaacc	acggcgctgg	tgccgttcca	9360
	1086	gctgtactgg	cgtaactatc	cccgcctgac	gacgccggcc	tgggttgatg	tgctgagcag	9420
	1087	taacaccgcg	acttacaata	tgcagggcgg	tttgctggcg	gtgcgcgacc	tgacgatggg	9480
	1088	caacctcgac	gggctcagcg	atctgccagg	cgcatcggaa	gattactact	cgtcgagcct	9540
	1089	gcgcctgctg	gtgatgttgg	cgcgcggtaa	ataaccttat	tcttgcggta	cacatggcga	9600
	1090	ggacgatgtc	cttgccattt	tccccacttt	tatccctctg	aatggcgtgt	ttttcacgct	9660
	1091	ttgttaacct	gcttgttact	cgtgatccca	ttcacaaggg	cgaattgacc	tgcaggcatg	9720
	1092	caagcttggc	gtaatcatgg	tcatagctgt	ttcctgtgtg	aaattgttat	ccgctcacaa	9780
	1093	ttccacacaa	catacgagcc	ggaagcataa	agtgtaaagc	ctggggtgcc	taatgagtga	9840
	1094	gctaactcac	attaattgcg	ttgcgctcac	tgcccgcttt	ccagtcggga	aacctgtcgt	9900
	1095	gccagctgca	ttaatgaatc	ggccaacgcg	cggggagagg	cggtttgcgt	attgggcgct	9960
	1096	cttccgctgg	cgcgccaggt	cgactctaga	ggatccccgg	ggaagatett	ccggaagatc	10020
	1097	ttcccgagct	cgaattaatt	ccgcgatgaa	ttgatcccgg	aagttcctat	tctctagaaa	10080
	1098	gtataggaac	tcgaattggt	cgacaagcta	gcttgcatgc	aagcttgtat	tctatagtgt	10140
	1099	cacctaaatc	gtatgtgtat	gatacataag	gttatgtatt	aattgtagcc	gcgttctaac	T0200
	1100	gacaatatgt	acaagcctaa	ttgtgtagca	tctggcttac	tgaagcagac	cctatcatct	10260

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/885,297A

DATE: 03/25/2002 TIME: 10:39:43

Input Set : A:\seqlist.txt

```
1101 ctctcgtaaa ctgccgtcag agtcggtttg gttggacgaa ccttctgagt ttctggtaac 10320
    1102 gccgttccgc accccggaaa tggtcagcga accaatcagc agggtcatcg ctagcccatg 10380
    1103 gctaattctg tcagccgtta agtgttcctg tgtcactgaa aattgctttg agaggctcta 10440
    1104 agggettete agtgegttae atceetgget tgttgteeae aacegttaaa eettaaaage 10500
    1105 tttaaaagcc ttatatattc tttttttct tataaaactt aaaaccttag aggctattta 10560
    1106 agttgctgat ttatattaat tttattgttc aaacatgaga gcttagtacg tgaaacatga 10620
    1107 gagettagta egttageeat gagagettag taegttagee atgagggttt agttegttaa 10680
    1108 acatgagage ttagtacgtt aaacatgaga gettagtaeg tgaaacatga gagettagta 10740
    1109 cgtactatca acaggttgaa ctgcggatct tgcggccgca aaaattaaaa atgaagtttt 10800
    1110 gacggtatcg aaccccagag tcccgctcag aagaactcgt caagaaggcg atagaaggcg 10860
    1111 atgcgctgcg aatcgggagc ggcgataccg taaagcacga ggaagcggtc agcccattcg 10920
    1112 ccgccaaget etteageaat ateaegggta gecaaegeta tgteetgata geggteegee 10980
    1113 acacccagcc ggccacagtc gatgaatcca gaaaagcggc cattttccac catgatattc 11040
    1114 ggcaagcagg catcgccatg ggtcacgacg agatcctcgc cgtcgggcat ccgcgccttg 11100
    1115 agectggega acagttegge tggegegage eeetgatget ettegteeag ateateetga 11160
    1116 tcgacaagac cggcttccat ccgagtacgt gctcgctcga tgcgatgttt cgcttggtgg 11220
    1117 tcgaatgggc aggtagccgg atcaagcgta tgcagccgcc gcattgcatc agccatgatg 11280
    1118 gatactttct cggcaggagc aaggtgagat gacaggagat cctgccccgg cacttcgccc 11340
     1119 aatagcagcc agtcccttcc cgcttcagtg acaacgtcga gcacagctgc gcaaggaacg 11400
     1120 cccgtcgtgg ccagccacga tagccgcgct gcctcgtctt ggagttcatt cagggcaccg 11460
     1121 gacaggtcgg tcttgacaaa aagaaccggg cgcccctgcg ctgacagccg gaacacggcg 11520
     1122 gcatcagage agecgattgt etgttgtgee cagtcatage egaatageet etecacecaa 11580
     1123 geggeeggag aacetgegtg caatecatet tgttcaatea tgegaaaega teeteateet 11640
     1124 gtctcttgat ccactagatt attgaagcat ttatcagggt tattgtctca tgagcggata 11700
     1125 catatttgaa tgtatttaga aaaataaaca aataggggtt ccgcgcacat ttccccgaaa 11760
                                                                            11772
     1126 agtgccacct gc
E--> 1128 atty. docket no. bcI-024cP
                                                        - delete
```

### VERIFICATION SUMMARY

PATENT APPLICATION: US/09/885,297A TIME: 10:39:44

DATE: 03/25/2002

Input Set : A:\seqlist.txt

```
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:490 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:494 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:498 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:502 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:506 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:510 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                           SEQ ID:12
L:514 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
                                                           SEQ ID:12
L:518 M:336 W: Invalid Amino Acid Number in Coding Region,
L:522 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:526 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:530 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:534 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:538 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:542 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:546 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:550 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:554 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:558 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:562 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:607 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:609 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:613 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:617 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:621 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:625 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
                                                            SEQ ID:12
L:629 M:336 W: Invalid Amino Acid Number in Coding Region,
L:633 M:336 W: Invalid Amino Acid Number in Coding Region,
                                                            SEQ ID:12
L:637 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:641 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:645 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/885,297A
DATE: 03/25/2002
TIME: 10:39:44

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\03252002\1885297A.raw

```
L:649 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:653 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:657 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:661 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:665 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:669 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:673 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:677 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:681 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:685 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:689 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:693 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:697 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:701 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:705 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12
L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:765 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:775 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:779 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:781 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:785 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:787 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:789 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:793 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:797 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:803 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:809 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:811 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1128 M:254 E: No. of Bases conflict, LENGTH:Input:6 Counted:11792 SEQ:17
```

VERIFICATION SUMMARY

DATE: 03/25/2002 TIME: 10:39:44 PATENT APPLICATION: US/09/885,297A

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\03252002\1885297A.raw

L:1128 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11

L:1128 M:112 C: (48) String data converted to lower case,

L:1128 M:252 E: No. of Seq. differs, <211>LENGTH:Input:11772 Found:11792 SEQ:17